

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently amended) A material application apparatus that applies a material from a discharge port of a nozzle along a predetermined movement track on a surface while performing relative displacement of the surface of a workpiece disposed on a base and the nozzle with respect to each other, wherein

said discharge port is formed into a non-circular configuration and discharges said material to form a bead having a sectional configuration in which the height is larger than 0.9 times the width; wherein

the distance between said discharge port and the surface is 1.5 – 3X the height of said bead; [[and]]

the nozzle is parallel to the surface; and

said bead is elongated in a line parallel to the surface.

2. (Previously Presented) A material application apparatus comprising an application means for applying a material to a surface of a workpiece disposed on a base, and a movement means that makes said application means perform relative displacement along a predetermined movement track on said surface so as to apply the material into a bead configuration, wherein:

said application means includes a syringe and a nozzle being connected to the syringe and having a discharge port formed into a non-circular configuration; and

said nozzle is adapted so as to be rotatable in the periphery direction thereof in a state that said syringe is not rotated in the peripheral direction thereof.

3. (Original) The material application apparatus according to claim 1 or 2, wherein said discharge port is formed into a profile or opening configuration in which a first end portion positioned at the front end side in the direction of the movement along said movement track is wider than a second end portion positioned at the rear end side in the width in the direction crossing said movement track.

4. (Original) The material application apparatus according to claim 3, wherein said nozzle is controlled to rotate so that said first end portion precedes the second end portion generally throughout said movement track.

5. (Previously Presented) The material application apparatus according to claim 2, wherein said nozzle is adapted so as to be rotatable in the peripheral direction thereof by a motor provided with an output shaft positioned substantially parallel to said nozzle, and by a drive force transmission member between the output shaft and the nozzle.

6. (Previously Presented) A material application comprising an application means for applying a material to a surface of a workpiece disposed on a base, and a movement means that makes said application means perform relative displacement along a predetermined movement track on said surface so as to apply the material into a bead configuration, wherein:

said application means includes a syringe and a nozzle being connected to the syringe and having a discharge port formed into a non-circular configuration; wherein the discharge port of said nozzle is formed into an acute-angled triangle configuration having a base edge portion and a pair of side edge portions constituting two equilaterals longer than the base edge portion, and

said nozzle is adapted so as to be rotatable in the periphery direction thereof in a state that said syringe is not rotated in the peripheral direction thereof.

7. (Original) The material application apparatus according to claim 6, wherein said nozzle moves with said base edge portion as said first edge portion and the intersection point of said side edge portions as said second edge portion.

8. (Original) The material application apparatus according to claim 1 or 2, wherein said material is set to 10000cP-400000cP in degree of viscosity, and to 4-10 in thixo-index.

9. (Original) The material application apparatus according to claim 1 or 2, wherein the relative displacement speed of said surface and the nozzle with respect to each other and the discharge speed of the material from said discharge port are adapted so as to substantially coincide with each other.

10. (Previously Presented) The material application apparatus according to claim 2, wherein the space distance between said discharge port and the surface is set to around 1.5-3 times as the height of said bead.